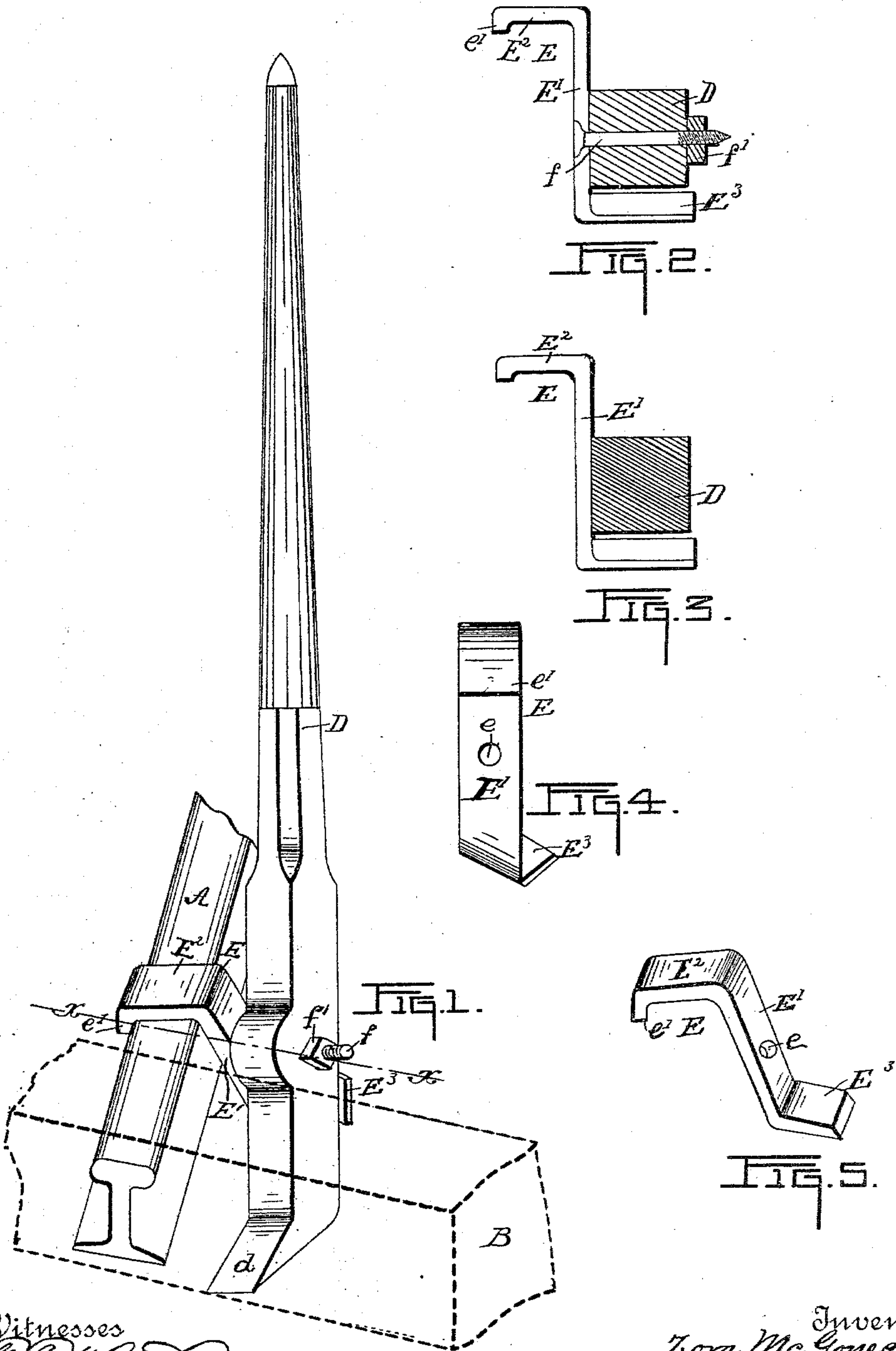


(No Model.)

Z. MCGONEGAL & H. E. CRILLY.
CROSS TIE HOLDER.

No. 552,965.

Patented Jan. 14, 1896.



Witnesses
Wm. H. Bassler
Wm. H. Bassler

Inventors,
Zora McGonegal,
Hugh E. Crilly.
By Attorney
Wm. R. Gerhart

UNITED STATES PATENT OFFICE.

ZORA MCGONEGAL, OF NEW YORK, N. Y., AND HUGH E. CRILLY, OF ALLENTOWN, PENNSYLVANIA.

CROSS-TIE HOLDER.

SPECIFICATION forming part of Letters Patent No. 552,965, dated January 14, 1896.

Application filed December 22, 1894. Serial No. 532,703. (No model.)

To all whom it may concern:

Be it known that we, ZORA MCGONEGAL, residing at New York, in the county and State of New York, and HUGH E. CRILLY, residing at Allentown, in the county of Lehigh and State of Pennsylvania, citizens of the United States, have invented certain Improvements in Cross-Tie Holders, of which the following is a specification.

10 This invention relates to improvements in that class of devices employed in laying railway-track for lifting the cross-ties and holding them up while the rail is being spiked thereto; and the object of the invention is to afford a permanent and reliable fulcrum for the bar or lever used for that purpose.

20 The invention consists in the combination, with a hook adapted to take over the head of a rail, of a lever secured to the hook and adapted to lift a cross-tie.

The invention consists, further, in details of construction hereinafter described, and then specifically pointed out in the claims.

25 In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of the device in the position occupied by it when holding a cross-tie up to the rail, the cross-tie being shown in broken lines. Fig. 2 is a section of the lever on the 30 line *xx* and an edge view of the hook, a portion being cut away to show the connection of the bolt. Fig. 3 is a transverse section of the lever and an edge view of the hook, showing a modification in the connection between 35 said bar and the hook. Fig. 4 is a view of the side of the hook opposite to that on which the lever is attached. Fig. 5 is a perspective view of the hook detached from the lever.

40 Similar letters indicate like parts throughout the several views.

Referring to the details of the drawings, A indicates a rail, B a cross-tie, and D a lever having the lower end *d* tapered to an edge and turned upward.

45 E is a hook, comprising an upright E', having a bolt-hole *e* through it, a bearing E² on the upper end of upright E' adapted to rest on the head of a rail and having a flange *e'* on its free end that takes over the side of the 50 rail-head, and a lip E³ projecting outward from the bottom of upright E'. The hook is

formed of a broad piece of metal, as illustrated, and the lever D is fulcrumed to the upright portion by a bolt *f*, passing through hole *e* and a corresponding perforation through 55 said lever, the lever being secured on the bolt by a nut *f'*. When the hook is freed from the rail to shift its position it is liable to turn unduly about bolt *f*, so that it must be turned upright by hand when it is to be again engaged with the rail-head. To prevent this 60 undue turning the broad outwardly-extending lip E³ is formed on the lower end of upright E' and takes under the lever, the contact of which with the sides of lip E³ limits 65 the turning of the hook and retains it in such position that it can readily be engaged with the head of a rail by the proper handling of lever D. The flange *e'* prevents the hook from being pulled transversely from the rail. 71

Instead of securing lever D to upright E' by means of a bolt and nut, it may be welded to said upright, as illustrated in Fig. 3, in which case the bearing E² serves as the fulcrum and is rocked back and forth on the rail-head by the vertical movements of the lever. 75

Our device affords a most efficient lifter and holder for railway-ties for the purpose of spiking the rails thereto.

We do not confine ourselves to the details 80 of construction shown and described, as it is obvious that changes may be made therein without departing from the spirit of our invention.

Having thus described our invention, what 85 we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a hook constructed to take over the head of a rail, of a lever secured to the hook and adapted to hold a 90 cross-tie up to the rail.

2. The combination, with a hook constructed to take over the head of a rail, of a lever fulcrumed to the hook and adapted to hold a cross-tie up to the rail. 95

3. The combination, with a hook constructed to take over the head of a rail, of a lever secured to the hook and adapted to engage a cross-tie below the top thereof.

4. The combination, with a hook constructed 100 to take over the head of a rail, of a lever secured to the hook and adapted to operate

parallel, approximately, with the rail and engage a cross-tie.

5 5. The combination, with a hook constructed to take over the head of a rail, of a lever pivoted to the hook and adapted to operate parallel, approximately, with the rail and engage a cross-tie.

10 6. A hook comprising an upright part, a bearing for the head of the rail and a flange on the free end of the bearing, in combination with a lever secured to said upright part.

15 7. The combination, with a hook having an upright part and a bearing constructed to take over the head of a rail, of a lever fulcrumed to said upright part.

20 8. The combination, with a hook having an upright part and a bearing constructed to take over the head of a rail, of a flange on the free end of the bearing, and a lever fulcrumed to said upright part.

9. The combination, with a hook having an upright part and a bearing constructed to take over the head of a rail, of a lever fulcrumed to said upright part, and a lip on the upright part extending beneath the lever. 25

10. The combination, with a hook having an upright part and a bearing constructed to take over a head of a rail, of a bolt passing through said upright part, a lever fulcrumed on the bolt and secured in place by a nut, a 30 flange on the free end of the bearing, and a lip on the upright part extending beneath the lever, substantially as and for the purpose specified.

ZORA MCGONEGAL.
HUGH E. CRILLY.

Witnesses:

JACOB HALBACH,
WM. R. GERHART.